CLAIMS

What is claimed is:

1. A portable communication system comprising:

a wireless transciever;

a display unit having a housing, a liquid crystal display carried by the housing, and a lens that magnifies an image on the display; and

a datalink extending between the transciever and the display unit.

2. The portable communication system of claim 1 further comprising a memory card reader within the housing of the display unit that receives input to be displayed on the display from a memory card that docks with the card reader.

3. The portable communication system of claim 1 further comprising a smart card reader within the housing of the display unit that receives input to be displayed on the display from a smart card that docks with the card reader.

4. The portable communication system of claim 1 wherein the liquid crystal display is color sequential.

5. The system of claim 2 wherein the display comprises:

an active matrix liquid crystal display including an array of at least 75,000 pixel electrodes, the array of pixel electrodes having an active area of less than 158 mm^2; and

a light emitting diode device that illuminates the array of pixel electrodes.

6. The system of claim 5 wherein the array of pixel electrodes comprises an array of at least 320 x 240.

7. The system of claim 5 wherein the array of pixel electrodes comprises an array of at least 640 x 480.

8. The system of claim 5 wherein the active matrix liquid crystal display further comprises an array of transistor circuits formed with single crystal silicon, the array of transistor circuits being bonded to an optically transmissive substrate with an adhesive layer.

9. The system of claim 1 wherein the housing of the display unit has a volume of less than 250 cm^3.

10. The system of claim 9 wherein the housing of the display unit has a volume of less than 165 cm^3.

11. The system of claim 1 wherein the datalink is a wired connection.

12. The system of claim 1 wherein the datalink is a wireless connection.

13. The system of claim 12 wherein the wireless connection is infrared.

14. A portable display system comprising:

a housing having a volume of less than 330 cm^3;

a liquid crystal display carried by the housing;

a lens that magnifies an image on the display; and

a card reader operating at least at 15 MHz within the housing that receives video input to be displayed

on the display from a card that docks with the card reader.

15. The portable display system of claim 14 wherein the audio transducer device is an acoustic speaker carried by the housing.

16. The system of claim 14 wherein the display comprises:

an active matrix liquid crystal display including an array of at least 75,000 pixel electrodes, the array of pixel electrodes having an active area of less than 158 mm^2; and

a light emitting diode device that illuminates the array of pixel electrodes.

17. The system of claim 16 wherein the array of pixel electrodes comprises an array of at least 640 x 480.

18. The system of claim 14 further comprising an audio transducer device carried by the housing that generates an audio sound.

19. A method of writing an image to a liquid crystal display comprising the steps of:

providing an active matrix liquid crystal display having a plurality of pixel electrodes, a counterelectrode and an interposed liquid crystal

setting a voltage to each pixel electrode;

allowing the liquid crystal to rotate towards an equilibrium; and

flashing a backlight; and

initializing the pixel electrodes to a set voltage.

20. The method of claim 19 wherein the liquid crystal is driven black and the pixel electrodes are initialized to a clear state.

21. The method of claim 19 further comprising the steps of repeating the setting, rotating, flashing and driving for each color subframe of the image; and sensing the properties of the liquid crystal; and heating the liquid crystal between frames when required.

22. The method of claim 19 further comprising the step of repeating the setting, rotating, flashing and driving for each color subframe of the image at a rate of over 165 subframes per second.

23. The method of claim 20 further comprising the steps of repeating the setting, rotating, flashing and driving for each color subframe of the image at a rate of over 165 subframes per second; and sensing the properties of the liquid crystal; and heating the liquid crystal between frames when required.

24. The method of claim 23 further comprising the steps of:

providing a portable display system having a housing carrying the liquid crystal display; and

operating at least at 15 MHz a memory card reader located within the housing for displaying video on the display from a memory card that docks with the card reader.